| | Application No. | Applicant(s) |
|--|---------------------------|--------------------------------|
| Notice of Allowability | | |
| | 10/538,309 | SPRING, GREGSON WILLIAM MARTIN |
| | Examiner | Art Unit |
| | HUNG Q. DANG | 2612 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | |
| All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. | | |
| 1. This communication is responsive to application's amendment dated 11/16/2007. | | |
| 2. The allowed claim(s) is/are <u>3-10 and 12-21</u> . | | |
| 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | |
| a) ☐ All b) ☐ Some* c) ☐ None of the: | | |
| Certified copies of the priority documents have been received. | | |
| 2. Certified copies of the priority documents have been received in Application No | | |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the | | |
| International Bureau (PCT Rule 17.2(a)). | | |
| * Certified copies not received: | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. | | |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | |
| 1) hereto or 2) to Paper No./Mail Date | | |
| (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of | | |
| Paper No./Mail Date | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
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| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) | 5. ☐ Notice of Informal P | atent Application |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. Interview Summary | (PTO-413), |
| 3. Information Disclosure Statements (PTO/SB/08), | Paper No./Mail Dat 7. | |
| Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit | 8. 🛛 Examiner's Stateme | ent of Reasons for Allowance |
| of Biological Material | 9. Other | |
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DETAILED ACTION

This communication is in response to application's amendment dated
 11/16/2007. The amendments of claims 3, 9, 10, 12-15, 20; the cancellation of claims
 1-2, 11 and the addition of claims 21 have been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 21 have been fully considered and are persuasive. The rejections of claims 3-10 and 12-21 have been withdrawn.

Allowable Subject Matter

3. Claims 3-10 and 12-21 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 21, the prior arts of record fail to teach or disclose a communication system for down hole use as claimed in claim 21, which further comprises a torque generating apparatus that generates torque in response to the electrical output of the alternator and which is mechanically connected to the alternator for transmitting such torque to the alternator for regulating rotation thereof.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

- 5) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a) Elwood U.S. Patent 3,828,867 teaches a downhole mud turbine communication system, which comprises a drill collar having a first portion and a second portion separated from each other by an electrically insulating material; and a alternator having an output being electrically connected to each of the first and second portions (functions as a dipole antenna) of the drill collar. However, the communication system disclosed by Elwood does not teach a torque generating apparatus that generates torque in response to the electrical output of the alternator and which is mechanically connected to the alternator for transmitting such torque to the alternator for regulating rotation of said alternator.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. DANG whose telephone number is (571)272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571) 272-3059. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Q Dang 2/21/2008 H.D.

> ALBERT K. WONG PRIMARY EXAMINER